DEPARTMENT OF TRANSPORTATION
ESC/OE MS #43
1727 30TH Street, 2ND Floor
Sacramento, CA 95816

December 8, 2000

04-SM-101-15.4/17.7
04-235724
ACNH-P101(963)E

Addendum No. 7

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in SAN MATEO COUNTY IN SAN MATEO AND BELMONT FROM 0.1 km NORTH OF RALSTON AVENUE OVERCROSSING TO 0.2 km SOUTH OF HILLSDALE BOULEVARD OVERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on January 9, 2001. The original bid opening date was previously postponed indefinitely under Addendum No. 6, dated November 7, 2000.

This addendum is being issued to set a new bid opening date as shown herein and revise the Project Plans, the Notice to Contractors and Special Provisions, the Proposal and Contract, and the Federal Minimum Wages with Modification Number 15, dated 12-1-00. A copy of the modified wage rates are available for the contractor's use on the Internet Site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

Project Plan Sheets 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 38, 94, 95, and 96 are revised. A half-sized copy of the revised sheets are attached for substitution for the like-numbered sheets.

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES**,**" the third and fifth paragraphs are amended to read:

"The work (except plant establishment work) shall be diligently prosecuted to completion before the expiration of **320 WORKING DAYS** beginning on the fifteenth calendar day after approval of the contract."

"The Contractor shall diligently prosecute all work (including plant establishment) to completion before the expiration of **1070 WORKING DAYS** beginning on the fifteenth calendar day after approval of the contract."

In the Special Provisions, Section 5-1.017, "CONTRACT BONDS," is added as follows:

"5-1.017 CONTRACT BONDS
Attention is directed to Section 3-1.02, "Contract Bonds," of the Standard Specifications and these special provisions.
The payment bond shall be in a sum not less than one hundred percent of the total amount payable by the terms of the contract."

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In the Special Provisions, Section 5-1.13, "COMPENSATION ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS," is revised as attached.

In the Special Provisions, Section 10-1.41, "WETLAND REVEGETATION," is deleted.

In the Special Provisions, Section 10-1.46, "ASPHALT CONCRETE," the following paragraph is added after the first paragraph.:

"Open graded asphalt concrete shall conform to the provisions in "Open Graded Asphalt Concrete" elsewhere in these special provisions."

In the Special Provisions, Section 10-1.46A, "OPEN GRADED ASPHALT CONCRETE," is added as attached.

In the Special Provisions, Section 10-1.47, "ASPHALT CONCRETE (BRIDGE)**,**" is deleted.

In the Special Provisions, Section 10-2, "HIGHWAY PLANTING AND IRRIGATION SYSTEMS," is revised as attached.

In the Proposal and Contract, the Engineer's Estimate Item Numbers 2, 43, 50, 51, 57, 59, 71, 72, 74, and 132 are revised, Item Numbers 133 and 134 are added, and Item Numbers 61 and 73 are deleted as attached.

To Proposal and Contract book holders:

Replace pages 3, 5, 6, and 9 of the Engineer's Estimate in the Proposal with the attached revised pages 3, 5, 6, and 9 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

NICK YAMBAO, Chief
Office of Plans, Specifications & Estimates
Division of Office Engineer

Attachments

5-1.13 COMPENSATION ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS

The provisions of this section shall apply only to the following contract item:

ITEM CODE	ITEM
390155	ASPHALT CONCRETE (TYPE A)
390165	ASPHALT CONCRETE (OPEN GRADED)

The compensation payable for asphalt concrete will be increased or decreased in conformance with the provisions of this section for paving asphalt price fluctuations exceeding 5 percent (Iu/Ib is greater than 1.05 or less than 0.95) which occur during performance of the work.

The adjustment in compensation will be determined in conformance with the following formulae when the item of asphalt concrete is included in a monthly estimate:

A. Total monthly adjustment = AQ
B. For an increase in paving asphalt price index exceeding 5 percent:

$$A = 0.90\ (1.1023)\ (Iu/Ib - 1.05)\ Ib$$

C. For a decrease in paving asphalt price index exceeding 5 percent:

$$A = 0.90\ (1.1023)\ (Iu/Ib - 0.95)\ Ib$$

D. Where:

A = Adjustment in dollars per tonne of paving asphalt used to produce asphalt concrete rounded to the nearest $0.01.
Iu = The California Statewide Paving Asphalt Price Index which is in effect on the first business day of the month within the pay period in which the quantity subject to adjustment was included in the estimate.
Ib = The California Statewide Paving Asphalt Price Index for the month in which the bid opening for the project occurred.
Q = Quantity in tonnes of paving asphalt that was used in producing the quantity of asphalt concrete shown under "This Estimate" on the monthly estimate using the amount of asphalt determined by the Engineer.

The adjustment in compensation will also be subject to the following:

A. The compensation adjustments provided herein will be shown separately on payment estimates. The Contractor shall be liable to the State for decreased compensation adjustments and the Department may deduct the amount thereof from moneys due or that may become due the Contractor.
B. Compensation adjustments made under this section will be taken into account in making adjustments in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications.
C. The total price adjustment for price index increases of paving asphalt on this project shall not exceed $12,600.00.
D. In the event of an overrun of contract time, adjustment in compensation for paving asphalt included in estimates during the overrun period will be determined using the California Statewide Paving Asphalt Price Index in effect on the first business day of the month within the pay period in which the overrun began.

The California Statewide Paving Asphalt Price Index is determined each month on the first business day of the month by the Department using the median of posted prices in effect as posted by Chevron, Mobil, and Unocal for the Buena Vista, Huntington Beach, Kern River, Long Beach, Midway Sunset, and Wilmington fields.

In the event that the companies discontinue posting their prices for a field, the Department will determine an index from the remaining posted prices. The Department reserves the right to include in the index determination the posted prices of additional fields.

10-1.46A OPEN GRADED ASPHALT CONCRETE

Open graded asphalt concrete shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these special provisions.

The aggregate for open graded asphalt concrete shall conform to the 12.5-mm grading specified in Section 39-2.02, "Aggregate," of the standard Specifications.

Open graded asphalt concrete may be placed when the atmospheric temperature is below 20º C, but above 13º C, provided the following requirements are met:

A. The aggregate grading shall be 12.5-mm maximum.
B. Open graded asphalt concrete shall not be placed in a windrow or stockpile. Open graded asphalt concrete shall be transferred directly from the hauling vehicle to the asphalt paver hopper.
C. Open graded asphalt concrete shall be not less than 30 mm in compacted thickness.
D. Immediately prior to adding the asphalt binder to the open graded asphalt concrete mixture, the temperature of the aggregate shall be not more than 135º C. Open graded asphalt concrete shall be spread at a temperature of not less than 105º C measured in the hopper in the asphalt paver.
E. The compaction operation shall be such that the maximum distance between the asphalt paver and the initial breakdown rolling shall be no greater than 15 m.
F. During the placement of open graded asphalt concrete, the speed of the asphalt paver shall not exceed 10 m per minute.
G. The Contractor shall cover loads of open graded asphalt concrete with tarpaulins. The tarpaulins shall completely cover exposed open graded asphalt concrete in the hauling vehicle until the open graded asphalt concrete has been completely transferred into the asphalt paver hopper.

SECTION 10-2 HIGHWAY PLANTING AND IRRIGATION SYSTEMS

10-2.01 GENERAL

The work performed in connection with highway planting and irrigation systems shall conform to the provisions in Section 20, "Erosion Control and Highway Planting," of the Standard Specifications and these special provisions.

Full compensation for watering plants outside normal working hours shall be considered as included in the contract lump sum prices paid for highway planting and plant establishment work and no additional compensation will be allowed therefor.

PROGRESS INSPECTIONS

Progress inspections will be performed by the Engineer for completed highway planting and irrigation system work at designated stages during the life of the contract.

Progress inspections will not relieve the Contractor of responsibility for installation in conformance with the special provisions, plans and Standard Specifications. Work within an area shall not progress beyond each stage until the inspection has been completed, corrective work has been performed, and the work is approved, unless otherwise permitted by the Engineer.

The requirements for progress inspections will not preclude additional inspections of work by the Engineer at other times during the life of the contract.

The Contractor shall notify the Engineer, in writing, at least 4 working days prior to completion of the work for each stage of an area and shall allow a minimum of 3 working days for the inspection.

Progress inspections will be performed at the following stages of work:

A. During pressure testing of the pipelines on the supply side of control valves.
B. During testing of low voltage conductors.
C. Before planting begins and after completion of the work specified for planting in Section 20-4.03, "Preparing Planting Areas," of the Standard Specifications.
D. Before plant establishment work begins and after completion of the work specified for planting in Section 20-4.05, "Planting," of the Standard Specifications.
E. At intervals of one month during the plant establishment period.

COST BREAK-DOWN

The Contractor shall furnish the Engineer a cost break-down for the contract lump sum items of highway planting and irrigation system.

Cost break-downs shall be completed and furnished in the format shown in the samples of the cost break-downs included in this section. Unit descriptions of work shown in the samples are the minimum to be submitted. Additional unit descriptions of work may be designated by the Contractor. If the Contractor elects to designate additional unit descriptions of work, the quantity, value and amount for those units shall be completed in the same manner as for the unit descriptions shown in the samples. The units and quantities given in the samples are to show the manner of preparing the cost break-downs to be furnished by the Contractor.

The Contractor shall determine the quantities required to complete the work shown on the plans. The quantities and their values shall be included in the cost break-downs submitted to the Engineer for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-downs submitted for approval.

No adjustment in compensation will be made in the contract lump sum prices paid for highway planting and irrigation system due to differences between the quantities shown in the cost break-downs furnished by the Contractor and the quantities required to complete the work as shown on the plans and as specified in these special provisions.

The sum of the amounts for the units of work listed in each cost break-down for highway planting and irrigation system work shall be equal to the contract lump sum price bid for the work. Cost break-downs shall be submitted to the Engineer for approval within 15 working days after the contract has been approved. Cost break-downs shall be approved, in writing, by the Engineer before a partial payment for the items of highway planting and irrigation system will be made.

Approved cost break-downs will be used to determine partial payments during the progress of the work and as the basis of calculating the adjustment in compensation for the items of highway planting and irrigation system due to changes ordered by the Engineer. When an ordered change increases or decreases the quantities of an approved cost break-down, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the quantity of a contract item of work in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications.

HIGHWAY PLANTING COST BREAK-DOWN

Contract No. 04-235724

UNIT DESCRIPTION	UNIT	APPROXIMATE QUANTITY	VALUE	AMOUNT
ROADSIDE CLEARING	LS	LUMP SUM		
PLANT (GROUP A)	EA	570		
PLANT (GROUP M)	EA	700		
WILDFLOWER SEEDING	M2	765		
MULCH	M3	17		
PREPARE HOLE (SOIL AMENDMENT)	M3	17		
COMMERCIAL FERTILIZER (TABLET)	EA	570		

TOTAL _____

IRRIGATION SYSTEM COST BREAK-DOWN

Contract No. 04-235724

UNIT DESCRIPTION	UNIT	APPROXIMATE QUANTITY	VALUE	AMOUNT
CONTROL AND NEUTRAL CONDUCTORS	LS	LUMP SUM		
CHECK/TEST EXISTING IRRIGATION FACILITIES	LS	LUMP SUM		
REMOVE EXISTING IRRIGATION FACILITIES	LS	LUMP SUM		
40 MM ELECTRIC REMOTE CONTROL VALVE	EA	7		
50 MM ELECTRIC REMOTE CONTROL VALVE (MASTER)	EA	3		
8 STATION IRRIGATION CONTROLLER (WALL MOUNTED)	EA	3		
3 WIRE DECODER	EA	7		
15 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	472		
20 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	320		
25 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	696		
32 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	614		
40 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	72		
50 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	84		
65 MM PLASTIC PIPE (PR200) (SUPPLY LINE)	M	834		
75 MM PLASTIC PIPE (PR315) (SUPPLY LINE)	M	466		
50 MM BACKFLOW PREVENTER ASSEMBLY	EA	3		
BACKFLOW PREVENTER ASSEMBLY ENCLOSURE	EA	3		
SPRINKLER (TYPE C-2)	EA	570		
50 MM GATE VALVE	EA	2		
75mm GATE VALVE	EA	2		
40 MM WYE STRAINER	EA	4		

TOTAL _____

IRRIGATION SYSTEM COST BREAK-DOWN

Contract No. 04-235724

UNIT DESCRIPTION	UNIT	APPROXIMATE QUANTITY	VALUE	AMOUNT
20 MM QUICK COUPLING VALVE	EA	4		
REMOTE CONTROL VALVE ACTUATOR SYSTEM	EA	1		

TOTAL _____

MAINTAIN EXISTING PLANTS

Existing plants, where shown on the plans to be maintained, shall be maintained as directed by the Engineer. Maintaining existing plants will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

REMOVE EXISTING PLANTS FOR TRENCHING

Removing existing plants for trenching shall conform to the provisions in Section 20-5.026, "Remove Existing Plants for Trenching," of the Standard Specifications and these special provisions.

Removing existing plants for trenching work shall consist of removing and replacing ground cover, pruning trees and shrubs within trench locations, applying preemergents and disposing of removed ground cover and prunings.

Replacement of removed ground cover within the maximum 1.8-m width, as specified in Section 20-5.026, "Remove Existing Plants for Trenching," of the Standard Specifications, will not be required.

Replacement of removed ground cover within the maximum 1.8–m width, as specified in Section 20-5.026, "Remove Existing Plants for Trenching," of the Standard Specifications, will not be required.

Trees and shrubs adjacent to dikes, walks, fences, guard railing, and pavement edges may be pruned back 3 m from these facilities to facilitate trenching work. When trenching is to be performed adjacent to other trees and shrubs that cannot be avoided, the trees and shrubs may be pruned upon receipt of prior written approval of the Engineer.

Pruning shall include removal of deadwood, suckers, and broken or bruised branches 25 mm or larger in diameter. Pruning shall conform to the provisions in Section 20-4.055, "Pruning," of the Standard Specifications.

Removed ground cover and pruned materials shall be disposed of outside the highway right of way in conformance with the provisions in Section 7-l.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications. At the Contractor's option, removed ground cover and prunings may be reduced to chips. Chipped materials shall be spread within the highway right of way where designated by the Engineer.

Shrubs adjacent to dikes, fences, guard railing, and the edge of pavement within the 3-m pruned area designated above, that in the opinion of the Engineer should be removed after pruning, shall be removed and disposed of. Removing and disposing of the shrubs not otherwise provided for will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

One application of a pre-emergent pesticide shall be applied to trenched areas in existing ground cover areas and to trenched areas adjacent to fences, curbs, dikes and shoulders. The Engineer will determine when the pre-emergent pesticide shall be applied.

PRUNE EXISTING PLANTS

Existing plants, as determined by the Engineer, shall be pruned. Pruning of the existing plants, except as otherwise provided in these special provisions, will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

10-2.03 EXISTING HIGHWAY IRRIGATION FACILITIES

The work performed in connection with the various existing highway irrigation system facilities shall conform to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these special provisions.

Water shall be maintained in conformance with the provisions in Section 20-5.025, "Maintain Existing Water Supply," of the Standard Specifications.

CHECK AND TEST EXISTING IRRIGATION FACILITIES

Existing irrigation facilities that are to remain or to be relocated, and that are within those areas where clearing and grubbing or earthwork operations are to be performed, shall be checked for missing or damaged components and proper operation prior to performing clearing and grubbing or earthwork operations. Existing irrigation facilities outside of work areas that are affected by the construction work shall also be checked for proper operation.

A written list of existing irrigation system deficiencies shall be submitted to the Engineer within 5 working days after checking the existing facilities.

Deficiencies found during checking of the existing facilities shall be corrected as directed by the Engineer. Corrective work ordered by the Engineer will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

Repairs to the existing irrigation facilities ordered by the Engineer after checking and testing the facilities, and further repairs required thereafter as ordered by the Engineer, except as otherwise provided under "Existing Highway Irrigation Facilities" of these special provisions, will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

REMOVE EXISTING IRRIGATION FACILITIES

Existing irrigation facilities within the project limits shall be removed and disposed of. Facilities that are more than 150 mm below finished grade may be abandoned in place.

Facilities to be removed, shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

10-2.03 HIGHWAY PLANTING

The work performed in connection with highway planting shall conform to the provisions in Section 20-4, "Highway Planting," of the Standard Specifications and these special provisions.

HIGHWAY PLANTING MATERIALS

Mulch

Mulch (Erosion Control) as specified elsewhere in these special provisions shall consist of either wood chips or tree bark or a combination of both.

Deleterious materials such as rocks, glass, plastics, metals, colds, weeds, weed seeds, coarse objects, sticks larger than the specified particle size, salts, paint, petroleum products, pesticides or other chemical residues that would be harmful to plant or animal life shall not exceed 0.1 percent of the mulch volume. Chipping shall include shredding, grinding or any other method used to reduce mulch materials to the specified size.

Mulch for plant basins shall be wood chips. Wood chips produced from tree trimmings may contain leaves and small twigs.

Commercial Fertilizer

Commercial fertilizer (granular) shall be a pelleted or granular form and shall fall within the following guaranteed chemical analysis range:

Ingredient	Percentage Range
Nitrogen	16
Phosphoric Acid	6
Water Soluble Potash	8

Commercial fertilizer (tablet) shall be slow release and shall be in tablet form. Each tablet, as shown in the Plant List of the plans, shall have a mass of 21 g ± 1 g, and shall have the following guaranteed chemical analysis:

Ingredient	Percentage
Nitrogen	20
Phosphoric Acid	10
Water Soluble Potash	5

At the option of the Contractor, two 10.5-g tablets may be used in place of each 21-g tablet designated on the plans or specified in these special provisions. Regardless of the tablet size used, each tablet shall be the slow release type and shall have the same guaranteed chemical analysis as specified for the 21-g tablets. Each 10.5-g tablet shall have a mass of 10.5 g ± 0.5-g.

ROADSIDE CLEARING

Prior to preparing planting areas, mulch (erosion control) areas, and wild flower seeding areas, or commencing irrigation trenching operations for planting areas, trash and debris shall be removed from the entire highway right of way within the project limits, excluding paved areas, medians and existing planted areas where existing plants are to remain.

In addition to removing trash and debris, the project area shall be cleared as specified herein:

A. At the option of the Contractor, removed trees and shrubs may be reduced to chips. Chipped material shall be spread within the project limits at locations designated by the Engineer. Chipped material shall not be substituted for mulch, nor shall the chipped material be placed within areas to receive mulch.
B. Weeds shall be killed and removed within the entire highway right of way, within the project limits, and excluding median areas, new and existing pavement, curb, sidewalk and other surfaced areas.

After the initial roadside clearing is complete, additional roadside clearing work shall be performed as necessary to maintain the areas, as specified above, in a neat appearance until the start of the plant establishment period. This work shall include the following:

A. Trash and debris shall be removed.
B. Rodents shall be controlled.
C. Weed growth shall be killed before the weeds reach the seed stage of growth or exceed 150 mm in length, except for weeds in wild flower seeding areas to be mowed.
D. Weeds in plant basins, including basin walls, shall be removed by hand pulling, after the plants have been planted.

Weed Control

Weed control shall also conform to the following:

A. Areas to be mowed shall be mowed when weed height exceeds 300 mm. Weeds shall be mowed to a height of 50 mm to 150 mm.
B. Disposal of mowed material and killed weeds after initial roadside clearing will not be required, unless otherwise directed by the Engineer. When directed by the Engineer, mowed material and killed weeds shall be disposed of and the disposal will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

Roadside clearing work shall not include work required to be performed as clearing and grubbing as specified in Section 16, "Clearing and Grubbing," of the Standard Specifications.

PESTICIDES

Pesticides used to control weeds shall conform to the provisions in Section 20-4.026, "Pesticides," of the Standard Specifications. Except as otherwise provided in these special provisions, pesticide use shall be limited to the following materials:

Cacodylic Acid
Diquat
Glyphosate
Isoxaben (Preemergent)
Oxadiazon - 50 percent WP (Preemergent)
Oryzalin (Preemergent)
Pendimethalin (Preemergent)
Prodiamine (Preemergent)
Trifluralin (Preemergent)

Glyphosate shall be used to kill stolon type weeds.

Oxadiazon shall be of the emulsifiable concentration or wettable powder type, except when Oxadiazon is used under mulch in conformance with these special provisions.

A minimum of 100 days shall elapse between applications of preemergents.

If the Contractor elects to request the use of other pesticides on this project, the request shall be submitted, in writing, to the Engineer not less than 10 working days prior to the intended use of the other pesticides. Except for the pesticides listed in these special provisions, no pesticides shall be used or applied without prior written approval of the Engineer.

Pesticides shall not be applied within the limits of the plant basins. Pesticides shall not be applied in a manner that allows the pesticides to come in contact with the foliage and woody parts of the plants.

PREPARING PLANTING AREAS

Plants adjacent to drainage ditches shall be located so that after construction of the basins, no portion of the basin walls shall be less than the minimum distance shown on the plans for each plant involved.

PREPARE HOLES

Holes for plants shall be excavated to the minimum dimensions shown on the plans. Planting holes for vines shall be located directly under the core holes in the sound walls.

Backfill material for plant holes shall be a mixture of soil and soil amendment as shown on the Plant List. Backfill material shall be thoroughly mixed and uniformly distributed throughout the entire depth of the plant hole without clods and lumps.

PLANTING

Commercial fertilizer shall be placed at the time of planting and at the rates shown on the plans.

Commercial fertilizer (tablet) will be placed approximately half the depth of the root ball for all Plant Group A plants.

Attention is directed to "Irrigation Systems Functional Test" of these special provisions regarding functional tests of the irrigation systems. Planting shall not be performed in an area until the functional test has been completed for the irrigation system serving that area.

WILD FLOWER SEEDING

Wild flower seeding shall conform to the provisions in Section 20-3, "Erosion Control," of the Standard Specifications and these special provisions.

Wild flower seeding work shall consist of removing weeds, scarifying the soil, and dry applying seed to areas above 1.4 NVGD shown on the plans as "WETLAND SEEDING".

Wild flower seeding materials shall not be applied prior to November 1 or after March 1. If wild flower seeding work cannot be performed prior to the start of plant establishment and within the above specified time limit, then the work shall be performed during the plant establishment period when directed by the Engineer.

Pesticides shall not be used on wild flower seeding areas after the seed has been applied.

Site Preparation

Immediately prior to planting wild flower seeding areas, trash and debris shall be removed, and weeds shall be removed. After weed removal and just prior to seed application, wild flower seeding areas shall be scarified to a minimum depth of 25 mm.

Removed trash and debris shall be disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Materials shall conform to the provisions in Section 20-2, "Materials," of the Standard Specifications and these special provisions.

Seed

Seed shall conform to the provisions in Section 20-2.10, "Seed," of the Standard Specifications. Individual seed species shall be measured and mixed in the presence of the Engineer.

Seed shall be delivered to the job site in unopened separate containers with the seed tag attached. Containers without a seed tag will not be accepted.

A sample of approximately 30 g of seed will be taken from each seed container by the Engineer.

Non-Legume Seed

Non-legume seed shall consist of the following:

NON-LEGUME SEED

Botanical Name (Common Name)	Percent Germination (Minimum)	Kilograms Pure Live Seed Per Hectare (Slope Measurement)
Frankenia grandifolia (Alkali Heath)	30	0.05
Atriplix triangularis (Spear Scale)	40	0.75
Distichlis spicata Salt Grass	50	1.5
Limoniun californicum Western Marsh Rosemary	15	0.5
Hordeum brachyantherum No Common Name	50	8.0
Grindelia stricta Gum Plant	30	0.7

Straw

Straw shall conform to the provisions in Section 20-2.06, "Straw," of the Standard Specifications and these special provisions.

Straw shall be derived from rice.

Application

Wild flower seed shall be applied at the rate of 11.5kg per hectare (slope measurement).

Seed shall be incorporated into the soil to a maximum depth of 6 mm by raking, dragging or drilling.

Straw shall be spread at the rate of 3.0 tonnes per hectare (slope measurement).

Watering of wild flower seeding areas will not be required unless directed by the Engineer. When directed by the Engineer, watering will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

MEASUREMENT AND PAYMENT

Quantities of wild flower seeding will be determined by the square meter from actual measurement of the wild flower seeding area.

Full compensation for wildflower seeding shall be considered as included in the contract lump sum price paid per for highway planting and no additional compensation will be allowed therefor.

PLANT ESTABLISHMENT WORK

The plant establishment period shall be Type 2 and shall be not less than 750 working days.

After sowing wild flower seed, plant establishment work for the wild flower seeding areas will be required including removing trash and debris.–Attention is directed to "Relief From Maintenance and Responsibility" in these special provisions regarding relief from maintenance and protection.

Commercial fertilizer (granular) shall be applied to vines during the first week of February and August of each year. Commercial fertilizer shall be applied at the rates shown on the plans.

Weeds within plant basins, including basin walls and ground cover, shall be controlled by hand pulling.

Weeds within median areas, pavement, curbs, sidewalk, and other surfaced areas shall be controlled by killing.

Vines shall be trained onto sound walls and through cored holes in walls.

At the option of the Contractor, plants of a larger container size than those originally specified may be used for replacement plants during the first 125 working days of the plant establishment period. The use of plants of a larger container size than those originally specified for replacement plants shall be at the Contractor's expense.

After 125 working days of the plant establishment period have been completed, replacement of plants shall be No. 5 size for No. one size plants, and 2 liner-sized plants for plant No. 3 at a spacing of 0.15 m on centers.

When ordered by the Engineer, one application of a preemergent pesticide conforming to the provisions in "Pesticides" of these special provisions, shall be applied between 40 and 50 working days prior to completion of the plant establishment period. This work will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

Wye strainers shall be cleaned at least 15 days prior to the completion of the plant establishment period.

The final inspection shall be performed in conformance with the provisions in Section 5-1.13, "Final Inspection," of the Standard Specifications and shall be completed a minimum of 20 working days before the estimated completion of the contract.

ENGINEER'S ESTIMATE
04-235724

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070010	PROGRESS SCHEDULE (CRITICAL PATH)	LS	LUMP SUM	LUMP SUM	
2	070018	TIME RELATED OVERHEAD	WDAY	320		
3 (S)	071322	TEMPORARY FENCE (TYPE CL-1.8)	M	1350		
4	019648	NON-STORM WATER DISCHARGE	LS	LUMP SUM	LUMP SUM	
5	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
6	074020	WATER POLLUTION CONTROL	LS	LUMP SUM	LUMP SUM	
7	019649	TEMPORARY COVER	M2	2500		
8	019650	TEMPORARY DRAINAGE INLET PROTECTION	EA	13		
9	019651	TEMPORARY CONCRETE WASHOUT FACILITY	LS	LUMP SUM	LUMP SUM	
10	019652	TEMPORARY FENCE (TYPE ESA)	M	1910		
11	019653	STABILIZED CONSTRUCTION ENTRANCE	EA	5		
12	074025	TEMPORARY SOIL STABILIZER	M2	25 000		
13	074028	TEMPORARY FIBER ROLL	M	390		
14	019654	TEMPORARY FIBER ROLL (CHECK DAM)	M	28		
15	074029	TEMPORARY SILT FENCE	M	3690		
16	074031	TEMPORARY SAND BAG	EA	310		
17 (S)	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
18 (S)	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
19 (S)	120149	TEMPORARY PAVEMENT MARKING (PAINT)	M2	11		
20 (S)	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	M	22 900		

ENGINEER'S ESTIMATE
04-235724

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	152392	RELOCATE ROADSIDE SIGN (WOOD POST)	EA	19		
42 (S)	861295	RELOCATE EXTINGUISHABLE MESSAGE SIGN	EA	1		
43 (S)	153101	PLANE ASPHALT CONCRETE PAVEMENT	M2	8400		
44	153210	REMOVE CONCRETE	M3	35		
45	019662	ASBESTOS SURVEY	LS	LUMP SUM	LUMP SUM	
46	156576	REMOVE METAL RAILING	M	120		
47	157560	BRIDGE REMOVAL (PORTION)	LS	LUMP SUM	LUMP SUM	
48	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
49	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
50	190101	ROADWAY EXCAVATION	M3	15 100		
51	019663	ROADWAY EXCAVATION (AERIALLY DEPOSITED LEAD MATERIAL, TYPE Y)	M3	7850		
52	019664	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
53 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	M3	288		
54 (F)	192020	STRUCTURE EXCAVATION (TYPE D)	M3	53		
55	193030	PERVIOUS BACKFILL MATERIAL	M3	350		
56	194001	DITCH EXCAVATION	M3	180		
57	198100	LIGHTWEIGHT FILL	M3	13 230		
58 (F)	048361	LIGHTWEIGHT FILL (BRIDGE)	M3	436		
59	019665	GEOTEXTILE REINFORCEMENT FABRIC	M2	31 400		
60 (S)	200001	HIGHWAY PLANTING	LS	LUMP SUM	LUMP SUM	

ENGINEER'S ESTIMATE
04-235724

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	BLANK					
62 (S)	019667	MULCH (EROSION CONTROL)	M2	32 500		
63 (S)	203001	EROSION CONTROL (BLANKET)	M2	6510		
64 (S)	204099	PLANT ESTABLISHMENT WORK	LS	LUMP SUM	LUMP SUM	
65 (S)	208000	IRRIGATION SYSTEM	LS	LUMP SUM	LUMP SUM	
66 (S)	019668	WATER METER (50 MM) (BELMONT WATER DISTRICT)	EA	1		
67 (S)	019669	WATER METER (50 MM) (CALIFORNIA WATER COMPANY)	EA	1		
68 (S)	208731	200 MM CORRUGATED HIGH DENSITY POLYETHYLENE PIPE CONDUIT	M	15		
69	209801	MAINTENANCE VEHICLE PULLOUT	EA	3		
70	220101	FINISHING ROADWAY	LS	LUMP SUM	LUMP SUM	
71	260201	CLASS 2 AGGREGATE BASE	M3	6650		
72	390155	ASPHALT CONCRETE (TYPE A)	TONN	10 700		
73	BLANK					
74	397001	ASPHALTIC EMULSION (PAINT BINDER)	TONN	12		
75	490759	FURNISH PILING (CLASS 400C)	M	2290		
76 (S)	490760	DRIVE PILE (CLASS 400C)	EA	176		
77 (F)	019678	STRUCTURAL CONCRETE, SIGN FOOTING	M3	11		
78 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	M3	73		
79 (F)	510058	STRUCTURAL CONCRETE, WALL	M3	24		
80 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	M3	2.5		

ENGINEER'S ESTIMATE
04-235724

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121 (S)	019674	MODIFY TRAFFIC OPERATION SYSTEM (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
122 (S)	019675	MODIFY TRAFFIC OPERATION SYSTEM (LOCATION 3)	LS	LUMP SUM	LUMP SUM	
123 (S)	019676	MODIFY TRAFFIC OPERATION SYSTEM (LOCATION 4)	LS	LUMP SUM	LUMP SUM	
124 (S)	019677	MODIFY TRAFFIC OPERATION SYSTEM (LOCATION 5)	LS	LUMP SUM	LUMP SUM	
125 (S)	861101	RAMP METERING SYSTEM (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
126 (S)	861102	RAMP METERING SYSTEM (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
127	BLANK					
128	014712	SURVEY OF EXISTING NON-HIGHWAY FACILITIES	LS	LUMP SUM	LUMP SUM	
129	014715	VIBRATION MONITORING	LS	LUMP SUM	LUMP SUM	
130	150806	REMOVE PIPE	M	25		
131	150820	REMOVE INLET	EA	1		
132	020170	ROADWAY EXCAVATION (AERIALLY DEPOSITED LEAD MATERIAL, TYPE Z-2)	M3	1620		
133	390165	ASPHALT CONCRETE (OPEN GRADED)	TONN	1300		
134	860797	ELECTRICAL SERVICE (IRRIGATION)	LS	LUMP SUM	LUMP SU M	
135	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____